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1989

METROPOLITAN ROADS

PREPARED BY : THE TRANSPORTATION DIVISION
METROPOLITAN TORONTO PLANNING DEPARTMENT

METROPOLITAN PLAN REVIEW

The Municipality of Metropolitan Toronto

ME[illegible]OLITAN OFFICIAL PLAN REVIEW

BACKGROUND PAPER NO. 8

METROPOLITAN ROADS

Prepared by the Transportation Division of
the Metropolitan Planning Department

August 1989.

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PREFACE

The Official Plan for the Municipality of Metropolitan Toronto, entitled "Official Plan For The Urban Structure: Metropolitan Toronto", was adopted and largely approved in 1980. The Plan applies to the Metropolitan Planning Area comprised of the Cities of Toronto, Etobicoke, York, North York and Scarborough and the Borough of East York. This area is illustrated on Figure 1.

In March 1986, the Metropolitan Council approved a program to review the Plan. That program has been published as "Report No. 1: Progam", (April 1986, Metropolitan Toronto Planning Department) and copies are available from the Department.

The Metropolitan Plan Review will proceed by studying five major subject areas, namely:

- regional assumptions and the concept;
- housing and residential development;
- employment areas and activities;
- transportation; and,
- open space and environment.

Phase 1 of the review process, of which this study is a component, is the preparation and publication of series of technical background and proposal papers covering the above five subject areas. Community response to those papers is an integral part of the Metropolitan Plan Review and is encouraged from all sectors and levels of the community. All responses will be considered in any subsequent policy reports recommending revision to existing policy.

Metropolitan Roads is a technical background and proposal report which is the fourth in a series examining transportation issues in the Metropolitan Toronto Planning Area.

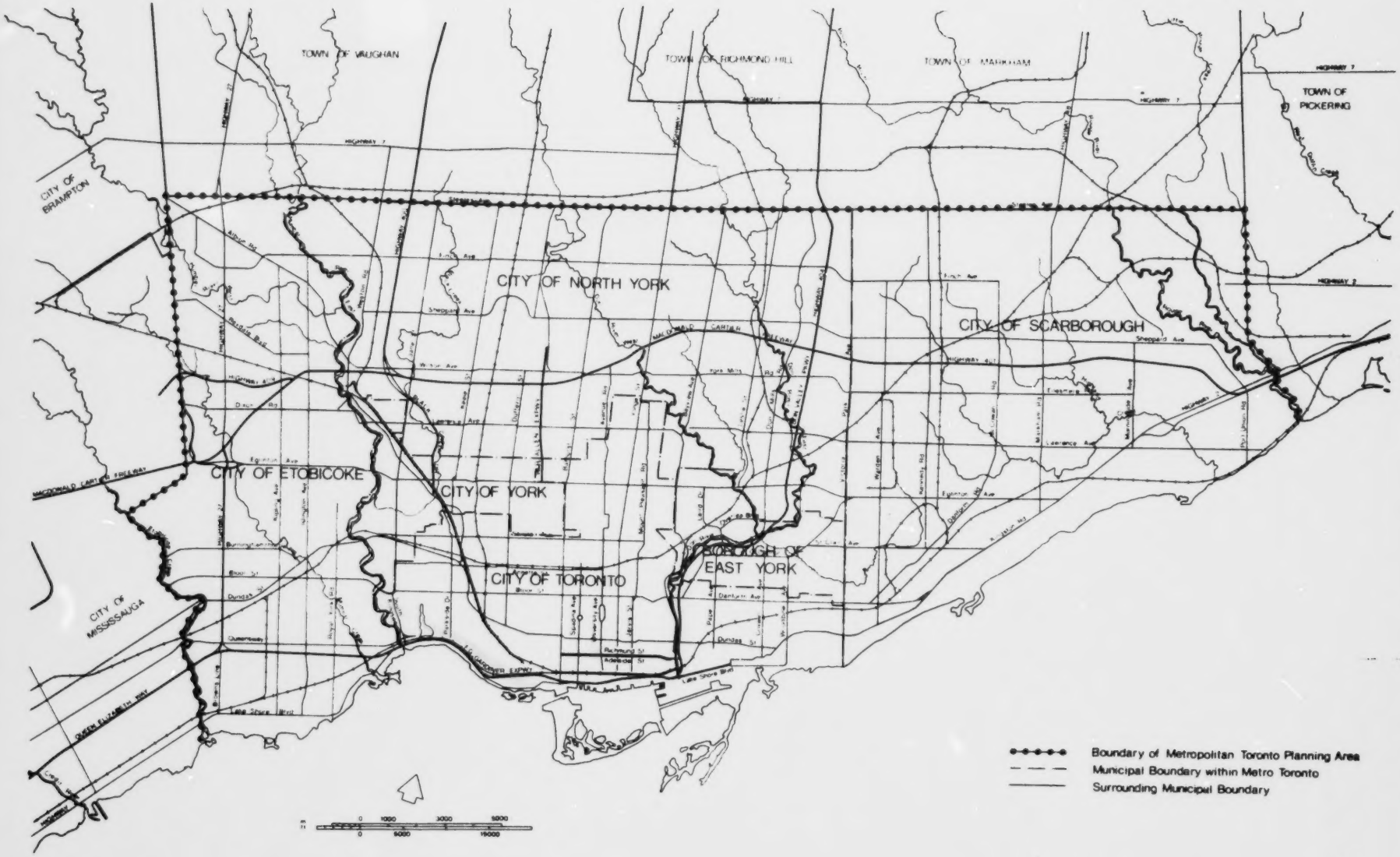

FIGURE 1 : THE METROPOLITAN PLANNING AREA

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Metropolitan Roads
Executive Summary

1.0 INTRODUCTION

The Official Plan for the Urban Structure of Metropolitan Toronto (hereinafter referred to as the Official Plan) outlines the policies and programs for the development of the Metropolitan transportation system. This system consists of a transit network (buses, streetcars, intermediate capacity transit and subway) and a road network (urban expressways and arterial roads) which are supported by Provincial (highways and inter-regional transit - GO) and local (collector and local roads) transportation networks.

The current Official Plan promotes a urban structure that is based on the development of a transportation system in which the transit network receives a higher profile than the road network. This policy direction is viewed as desirable in the context of today's concerns with environmentally sustainable development.

However, future population and employment growth in the Greater Toronto Area are expected to result in increasing levels of congestion on the region's arterial roads and expressways, which may ultimately impact the quality of life enjoyed by area residents and the economic performance of the region. It is unlikely that additions to the existing expressways will be constructed in the foreseeable future and, therefore, if the transportation system is to cope with future auto travel demands emphasis will have to be focussed on the Metropolitan arterial road network.

This paper examines the future conditions that are expected to impact the Metropolitan road network, the challenges and issues that will have to be addressed as a result of the future conditions and outlines new and expanded Official Plan policies which place greater emphasis on the planning and operation of the Metropolitan road system.

2.0 CONTEXT

Data from the Transportation Tomorrow Survey conducted in 1986 shows that approximately 8.5 million person trips were made on a daily basis in the Greater Toronto Area. Trips with an origin and/or destination within Metropolitan Toronto accounted for 60% of the regional total (5.1 million trips). Translating this data into automobile trips (and including daily truck movements) produces an estimate of approximately 3.2 million vehicle trips made every weekday in Metropolitan Toronto in 1986.

Historically, the following information summarizes the usage of Metropolitan roads:

- between 1975 and 1987 the largest increases in both total travel demand (106.2%)and vehicular travel demand (111.2%) have occurred at the Metropolitan boundary with the adjacent regions;

- auto usage is predominant in the suburban areas and declines as a percentage of overall travel demand the closer the count is taken to the Central Area of the City of Toronto;

- trucks account for 10% to 20% of daily traffic on Metropolitan roads and the rate of increase in truck traffic is higher than auto traffic;

- the number of trips made per person has increased from 1.3 per day in 1964 to 2.0 per day in 1986, an increase of 53.8 per cent;

- auto occupancies have decreased in all areas of Metropolitan Toronto; and

- the number of reportable accidents has risen in 1986 and 1987.

The overall message from this information is that traffic volumes have been increasing at a rate faster than employment and population growth, with resulting increased levels of congestion.

Future population in the region is predicted to increase by 40% between 1986 and 2011 while employment is predicted to increase by 44.4%. The majority of this growth is expected to occur in the regional municipalities outside Metropolitan Toronto. At the Metropolitan boundary auto and person trips are expected to increase 101.4% and 95.2%, respectively, to 2011 while at the Central Area Cordon the increases are expected to be only 12.3% and 8.6%, respectively.

The implications of these forecasts are that congestion on the road network will continue to grow and because the majority of trips will be longer distanced inter-regional trips congestion on the highway system is expected to worsen. As congestion worsens on the highway network, the ability of the arterial road network to accommodate the additional demands will be tested.

3.0 CHALLENGES

The following challenges for the Metropolitan road system were identified:

- o Congestion
  - pressures resulting from increased congestion will lead to increased wear and tear on the existing road infrastructure and to the need to examine improvements to the system;

- o Incompleted Road Network
  - some of the most important links in the existing planned road network (Figure 8 in the Official Plan) have not been constructed and these

projects will have to be undertaken in order to complete a basis grid network of roads. Assuming that these facilities are constructed, improvements to the system required to accommodate future demands will be limited to road widenings and to measures designed to maximize the capacity of the road system;

- o Competing demands for Existing Road Rights-of-Way
  - the growth in the number and extent of non-road transportation related demands for space within existing roads rights-of-way are affecting the primary function of the rights-of-way which is the movement of people and goods;

- o Road and Pedestrian Safety
  - recent experience has indicated that as congestion worsens drivers' driving habits deteriorate and future road improvements may have to be considered to reduce or eliminate identified safety problems;

- o Goods Movement
  - traffic congestion is affecting the ability to move goods within the Metropolitan area and as congestion increases the cost of moving goods will also increase. Of particular importance is the movement of dangerous goods by both truck and rail;

- o Maintenance and Rehabilitation
  - the aging road network will require adequate levels of funding to maintain the infrastructure in a cost effective manner. With ever increasing amounts of traffic the deterioration of the roads will occur at a faster rate, leading to the need for even more frequent maintenance work; and

o Funding

- since 1985 the Province has capped the level of its subsidy for Metropolitan road works at a level much less than 50% of the identified needs. The lower funding levels affect all aspects of the system by delaying new roads and road widenings and differing necessary rehabilitative functions. Future funding levels will determine how the system will ultimately operate and if it will be able to cope with future demands.

4.0 ISSUES

The following issues were identified upon which future action should be considered in the review of the Official Plan.

o How to deal with Existing and Future Road Congestion

- two approaches appear available to deal with future increases in demand:
  (i) develop programs and strategies to achieve maximum usage out of the existing system; and
  (ii) implement infrastructure improvements

  Limitations on the extent of improvements to the road system also necessitate that actions be undertaken to modify the future propensity for automobile use;

- the Official Plan must recognize that an efficient transportation system is vital to the region and that it must be an integrated network of both roads and transit;

- limitations on funding and the physical ability to expand the existing infrastructure lead to considering as a priority the following strategies to gain the optimum use of the existing road network:
  (a) Transportation System Management (TSM) measures;
  (b) Transit Priority;
  (c) High Occupancy Vehicle (HOV)/Bus Lanes; and
  (d) Demand Management; and

- notwithstanding the benefits of the above programs some infrastructure improvements may be warranted because of demand or because of road and pedestrian safety concerns. The types of improvements to be considered are:

  (a) new roads, either as currently identified in the Official Plan or identified through on-going review of needs; and
  (b) widenings of existing roads;

o Goods Movement
  - Council should recognize the importance of the movement of goods and adopt appropriate operational policies to ensure goods movement is considered in future planning;
  - appropriate policies should be developed to ensure the safe transportation of dangerous goods;

o Limited Rights-of-Way
  - modifications to the Official Plan should be considered to allow flexibility in the rights-of-way policies which will permit staff to react to special circumstances as they arise;

- o Non-Transportation Related Issues
  - recent initiatives such as increased densities along arterial roads, landscaping and urban design are not directly tied to the primary function of the road system, but these issues must be considered in the overall planning and operation of the network;

- o Environmental Assessment
  - problems have arisen with the current application of the Environmental Assessment Act and steps are being taken to review and address these problems. However, Official Plan policies must be structured to ensure compliance with the Act;

- o Maintenance and Rehabilitation
  - any improvement to the road system gained through the application of new policies and programs could be lost if the existing infrastructure falls into a state of disrepair. The maintenance and rehabilitation function must, therefore, be the highest priority of Council; and

- o Funding
  - lack of apropriate funding will lead to an overall worsening of congestion no matter what policies or programs are included in the Official Plan.

5.0 SUGGESTED AMENDMENTS TO EXISTING OFFICIAL PLAN POLICY STATEMENTS

The Official Plan, although containing a range of specific and detailed provisions is primarily a strategic instrument which outlines the broad policies and programs to be pursued in defining the form and function of the Metropolitan Toronto urban structure. The broad policies with respect to the

definition of the Metropolitan road system are currently contained in the plan; however, due to the ongoing growth in urban traffic, new and strengthened policies are required to outline the future directions needed to accommodate or at least manage the growth.

As noted in Section 2.0 of this paper total travel and in particular vehicular travel has increased in all areas of Metropolitan Toronto since 1975. In 1986 it was estimated that approximately 3.2 million vehicle trips were made within Metropolitan Toronto on a daily basis. Future projections of population and employment growth in the Greater Toronto Area (40% growth in population and 44% growth in employment) imply that current road congestion will worsen in future years. The most recent projection of future travel demand indicates growth in peak hour auto travel between 1981 and 2011 of from 12% in the central areas of Metropolitan Toronto, to 25% in the suburban areas, to over 100% across the boundaries between Metropolitan Toronto and the surrounding regional municipalities.

While the existing Official Plan provides for establishment and definition of the Metropolitan road system, it does not explicitly recognize the need for an integrated system of both roads and transit. In light of the worsening congestion problems throughout the Metropolitan area, the Official Plan should be modified to express support for an integrated transportation system which includes properly planned and maintained road and transit networks. It is therefore suggested that:

1. **a sub-section be included in Section 6.B Objectives to outline Council's support of an integrated transportation network.**

New policies for inclusion in the Official Plan must be reviewed to provide the necessary policy directions for development of plans and programs to accommodate the growth in future traffic volumes. Specifically, existing

Official Plan statements tend to concentrate on the provision of new elements to the transportation network. As noted earlier in this paper the nature of the Metropolitan urban environment limits the ability to provide new road infrastructure and, therefore, the necessity to optimize the use of the existing system is paramount. It is, therefore, suggested that:

2. **a section be included in the Official Plan which outlines Council's intent to optimize the use of the road system infrastructure, including special emphasis on intersection improvements, more efficient operating strategies, and the consideration of High Occupany Vehicle (HOV) lanes on all new road links and road widenings;**

3. **a section be included in the Official Plan which indicates the highest priority of Council be the maintenance and rehabilitation of existing transportation infrastructure; and**

4. **a section be included in the Official Plan to recognize the importance of the ability, based on appropriate study, to widen existing Metropolitan roads.**

While it is recognized that there are limited opportunities to provide new road links within Metropolitan Toronto, the future roads identified on Figures 8 and 9 of the Plan will eventually have to be constructed if future traffic volumes are to be accommodated. It should also be recognized that there may be other road links required that are not shown on Figures 8 and 9 and that the Figures may be amended from time to time to include those new roads. The current wording of Sections 6.B.4 and 6.E.2 of the Plan would seem to indicate that the road network as shown on Figures 8 and 9 is the complete network required to serve the area. This, of course, may not be the case. In addition, Section 6.E.1 indicates Council's intent not to support additional expressway facilities within Metropolitan Toronto. The growing long distance inter-regional travel demand and goods movement components of the traffic stream may in future require a re-examination of potential need for new expressways. Council should not restrict itself from examining

this potential and in any event Section 6.E.1 is redundant since amendments to Figures 8 and 9 of the Plan would be required to implement any new expressway ever contemplated. Therefore, it is suggested that:

5. **Sections 6.B.4 and 6.E.2 be modified to indicate that additions to the Metropolitan road network may be included on Figures 8 and 9 based upon appropriate review and study as provided for in Section 6.C of the Plan; and**

6. **Section 6.E.1 be removed from the Plan.**

Existing Official Plan policies with respect to the acquisition of road rights-of-way are too restrictive and do not permit sufficient flexibility to deal with the increasing demands for use of road rights-of-way (e.g. utilities, landscaping, street furniture) and to deal with necessary incremental acquisition of designated rights-of-way width. It is therefore suggested that:

7. **Sections 6.E.3 and 11.C.4 be modified to add flexibility to the road rights-of-way acquisition policies.**

Section 6.B.6 of the Official Plan outlines Council's intent with respect to the environmental impact of new or improved transportation system elements. Since all such improvements are subject to the Environmental Assessment Act the Plan should recognize the statutory requirements of the Act. It is therefore suggested that:

8. **Section 6.B.6 be modified to reflect the statutory requirements of the Environmental Assessment Act.**

The success of the T.T.C.'s surface transit network to move large numbers of people in the future will be tied closely with the ability of the buses and streetcars to operate on the road system. Section 6.A.2 of the Plan states

that Council "...shall encourage the preferential treatment on transit vehicles on appropriate arterial roads...". However, given the future importance of transit priority, it would be appropriate to strengthen the Council's commitment. It is therefore suggested that:

9. **a section be included in 6.B Objectives to outline Council's intent to actively pursue transit priority measures on Metropolitan roads.**

The importance of goods movement to the Metropolitan economy cannot be overstated. Increasing congestion will result in higher costs for goods movement and could impact on the economic viability of certain sectors of the Metropolitan economy. Council should recognize goods movement as an important component of overall travel demand in the area and policies should be considered for inclusion in the Official Plan which ensure the needs of goods movement are considered in planning and operation of the Metropolitan road system.

Council should also consider policies that clearly outline that the objective of Council is to ensure the safe movement of dangerous goods within Metropolitan Toronto, when those goods originate or are destined within Metropolitan Toronto, and to relocate through movements of dangerous goods outside of Metropolitan Toronto.

It is therefore suggested that:

10. **a section be included in 6.B Objectives to outline Council's intent to consider the needs of goods movement in the planning and operation of the Metropolitan road system; and**

11. **a section be in the Official Plan that outlines Council's intent to ensure the safe movement of dangerous goods within Metropolitan Toronto and to clearly indicate Council's desire to relocate through movements of dangerous goods outside Metropolitan Toronto.**

1.0 BACKGROUND

1.1 Introduction

In a recent study[1] of transportation and land use in thirty-two cities throughout the world, Metropolitan Toronto and thirty-one other cities were examined in terms of land use intensity, orientation to non-auto modes, level of traffic restraint, degree of centralization and public transportation performance. Metropolitan Toronto was described as being of medium density with some centralization, as compared to European and Asian cities. Metropolitan Toronto was also characterized as having good overall public transportation with some orientation to non-auto modes, but with significantly restrained traffic. In fact in terms of traffic restraint, Toronto ranked ahead all other North American cities surveyed (such as Boston, Washington, Los Angeles, New York and Chicago) and behind the following European cities; Zurich, London, West Berlin and Munich. Traffic restraint was measured by length of road per capita, parking availability in the CBD, vehicles per kilometer of road and car-kilometers per kilometer of road. The report concluded that cities with higher densities, good public transportation, especially rapid transit, and less orientation to auto modes were more efficient in terms of energy use and environmental impact.

The current Metropolitan Official Plan promotes many of the characteristics concluded to be desirable in the aforementioned report with its emphasis on concentrations of developments to be served by rapid transit and the lower profile given to the planning and operation of the Metropolitan road system viz a viz the transit system.

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1. J.R. Kenworth and P.U.G. Newman, Learning from the Best and the Worst: Transportation and Land Use Lessons from Thirty-two International Cities with Implications for Gasoline Use and Emissions.
Transport Research Paper.
School of Environmental and Life Sciences, Murdoch University Perth, Western Australia.

However, future projected population and employment growth in the Greater Toronto Area is expected to result in increasing levels of congestion on the regions arterial roads and expressways. These increased levels of congestion will not only impact the quality of life for residents in the Greater Toronto Area, but may also have a significant impact on the operation of the region's transit system and on the region's economic performance.

Future growth and population and employment distributions may result in longer home to work distances that will place more pressures on the region's expressway and highways. However, within Metropolitan Toronto it is highly unlikely that additions to the existing expressway network will be constructed in the foreseeable future, due to the recognition that new urban expressways would have to displace existing mature land uses. Therefore, if the Metropolitan transportation network is to cope with future auto travel demands the emphasis will have to be on the existing arterial road network which is the backone of the Metropolitan road system. This paper examines the future conditions that are expected to impact Metropolitan roads and outlines proposals for new and expanded Official Plan policies which place greater emphasis on the planning and operation of the Metropolitan road system.

1.2 Metropolitan Toronto Transportation System

The transportation system serving the Metropolitan Toronto area consists of a number of elements under the jurisdiction of four levels of government:

(i)	Federal:	airports
		railways
		port
(ii)	Provincial:	provincial highways
		GO Transit (inter-regional transit)
(iii)	Regional:	regional road system
		regional transit
(iv)	Local:	local road system

The Municipality of Metropolitan Toronto is the area's regional government and is responsible for the development and operation of the regional transit system (operated by the Toronto Transit Commission) and the regional road system (operated by the Roads and Traffic Department).

The Metropolitan road system is a sub-system of an overall road transportation network, consisting of local roads, arterial roads, urban expressways and provincial highways, intended to move people and goods throughout the Metropolitan area. The system is comprised of two urban expressways, the F.G. Gardiner Expressway and the Don Valley Parkway and a network of arterial roads, illustrated in Figure 2, that effectively span the entire Metropolitan area.

The Metropolitan road system operates in concert with the Provincial highway network and the road systems under the jurisdiction of the adjacent Regional Municipalities and the local area municipalities within Metropolitan Toronto. The operating efficiency of the Metropolitan road network relies in part on the effective operation of the roads systems under the jurisdiction of other levels of government.

Part VI of the Municipality of Metropolitan Toronto Act provides for the establishment of the Metropolitan road system and authorizes Metropolitan Council to add or remove roads from the overall network.

1.3 Role and Function of the Metropolitan Road System

A road system is comprised of various road types each of which are intended to perform specific tasks in an overall network that facilitates travel into, out of and within the metropolitan area. Roads are generally classified according to function as it relates to their traffic carrying capabilities and their degree of land use service. The regional road system is part of the hierarchy of roads that provide the connections between the Provincial inter-

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PREPARED AND DRAWN BY METROPOLITAN TORONTO PLANNING DEPARTMENT

FIGURE 2: METROPOLITAN TORONTO ROAD NETWORK

city highway network and local roads which provide the main access to land uses. The Metropolitan roads were legislated as a Metropolitan responsibility to ensure that the functions of these facilities were administered based on a regional perspective.

The Metropolitan Toronto road system is expected to perform the following functions:

(i) accommodate the movement of people and goods;
(ii) accommodate short, medium and long distance trips;
(iii) accommodate inter-regional trips;
(iv) distribute traffic to/from the expressway/highway system; and
(v) accommodate public transit services.

The various road types that are part of the Metropolitan road system can be classified into three basic catagories, based on the functions the roads are expected to accommodate.

Metropolitan expressways are expected to accommodate the movement of people and goods, long distance trips, inter-regional trips and inter-regional transit vehicles. Expressways are not expected to accommodate are access to abutting land uses, short and medium trips and trips utilizing non-motorized vehicles.

Metropolitan arterial roads are expected to accommodate the movement of people and goods, short to medium distance trips, inter-regional trips, transit vehicles, distribution of traffic from expressways/highways and if no other opportunity is available (i.e. local streets) access to abutting land use. Although the following functions are currently accommodated to varying degrees they are considered inappropriate for arterial roads: on-street parking, on-street loading/unloading, local trips, long distance trips and trips utilizing non-motorized vehicles.

While the above road classifications are currently defined in the Official Plan, there is a third class of road existing within Metropolitan Toronto which falls somewhere in-between expressways and arterial roads that is not defined in the current Official Plan. These roads accommodate the following functions: movement of people and goods, medium to long distance trips, inter-regional trips, transit vehicles and distribution of traffic from highway/expressways, although in many instances these roads can be considered surrogates for highways/expressways. These roads differ from urban arterial roads in that they are controlled access roads from which access to abutting land uses is not permitted (for example Black Creek Drive between Weston Road and Maple Leaf Drive).

1.4 Existing Metropolitan Official Plan Policies

The existing Official Plan has a number of policies which pertain to the regional road system. These policies are intended to outline Metropolitan Council's intent with respect to the development and operation of the system. Each existing policy will be discussed under the appropriate Official Plan Transportation Section heading.

1.4.1 Section 6.B Objectives

Section 6.B outlines Council's overall objectives for Metropolitan Toronto's transportation system and can be described under the following sub-headings:

- Section 6.B.2 Central Area

  The Official Plan outlines the transportation policies for the Central Area of the City of Toronto and deals almost exclusively with transit services, except for Section 6.B.2 which states:

  "Council shall support necessary improvements to the efficiency of traffic and pedestrian circulation within the Central Area."

- Section 6.B.3 Centres
  In defining the transportation policies for Metropolitan Centres, Council has indicated that:

  "The Metropolitan transportation system shall emphasize transit and arterial road accessibility to each designated centre, both from the surrounding districts and from the Planning Area as a whole."

- Section 6.B.4 Arterial Road Network
  "The Metropolitan arterial road network shall be completed in accordance with Figures 8 and 9. Its operational efficiency shall be improved to provide better accessibility throughout the Planning Area."

- Section 6.B.6 Environmental Impact
  Council has indicated that all transportation improvements undertaken by the Corporation will be evaluated so as to minimize adverse impacts on the environment. The specific policy states:

  "All expansion or improvements to roads and transit facilities will be based on environmentally sound principles in order that the Metropolitan transportation system will have minimal impact on the environment."

1.4.2 Section 6.C System Development

Metropolitan Council has outlined its policy direction with respect to how transportation system improvements will be identified and evaluated. Section 6.C states:

"The Metropolitan transportation system shall be improved and expanded incrementally. The implementation of additional major transit and road facilities will not be considered until detailed analysis of their overall costs and benefits has been carried out by the Corporation and the Toronto Transit Commission. This analysis shall include:

a. a program to monitor continually the performance of the system in association with land use change, in order to provide information for determining needs and priorities and for project planning;

b. feasibility and needs studies of transit lines and their technology and operation, including social, financial and environmental effects, in order to test the viability of additions to the system; and

c. a process of consultation with the public, the Area Municipalities and other levels of government."

1.4.3 Section 6.D Transit

In this section of the Official Plan, Council outlines its policies for the transit system serving Metropolitan Toronto. Since the surface transit network uses the Metropolitan arterial road network, Section 6.D.2 which states Council's intent with respect to surface transit also pertains to any discussion of Metropolitan roads. This section states:

"Council shall support the improvement and restructuring of the surface transit network of buses, trolley coaches and streetcars, and shall encourage the preferential treatment of transit vehicles on appropriate arterial roads and the greater utilization of off-peak services. In this regard, high priority shall be given to the rerouting and expansion of surface transit to support:

a. transit accessibility throughout the entire Planning Area;

b. the development of Metropolitan Centres;

c. the rapid transit facilities;

d. intensification of development for a variety of uses along Metropolitan arterial roads;

e. special regional recreational, educational and cultural facilities; and

f. the development of employment concentrations and community focal points."

1.4.4 Section 6.E Roads

This section details Council's specific policies for the Metropolitan road system.

"1. Subject to Section 6.G.3, the Corporation does not support the construction of additional expressways, with the exception of the extension of Highway 427 as shown on Figure 7, "Major Transportation Facilities".

2. Council shall establish the Metropolitan arterial roads identified on Figure 8, "Road Network: 2001".

3. The Corporation shall establish the right-of-way widths shown on Figure 9, "Metropolitan Arterial Roads: Rights-of-Way", subject to the footnotes thereon. The Area Municipalities shall be required, where necessary, to enact set-back by-laws to protect the rights-of-way defined on Figure 9. The Corporation shall acquire the additional property needed to achieve the rights-of-way designated by this Plan over an extended period of time. Where practicable, such property shall be acquired in co-operation with the Area Municipalities for a nominal sum through the development control process. As a general policy, the right-of-way widths of Metropolitan arterial roads may be re-examined in the context of Area Municipal Official Plan amendments which propose changes in land use or density.

4. Along Metropolitan arterial roads, outside the limits of the rights-of-way established by this Plan, it shall be the responsibility of the Area Municipalities to determine appropriate set-backs of buildings for environmental or other purposes.

5. In its consideration of Area Municipal Official Plans, plans of subdivision, road closing proposals, and local traffic plans, Council shall have regard for the compatibility of such plans and proposals with Council's objectives for transit service, and for the performance of Metropolitan arterial roads."

1.4.5 Section 6.H Other Policies

Section 6H combines three policies which do not fit into any of the major transportation policy sections in the Official Plan. Section 6.H.1 deals with the provision of pedestrian facilities and states :

"The Corporation supports the provision of pedestrian facilities and amenities along Metropolitan arterial roads for the convenience and safety of pedestrians."

The Metropolitan Toronto Act outlines that the responsibility for the provision of sidewalks is that of the local area municipality.

1.5 Amendments to the Official Plan Since 1980

Since the approval of the Official Plan in 1980, eleven amendments to the Plan have been adopted by Metropolitan Council (descriptions of the amendments are provided in Appendix A). Six of the eleven amendments, Nos. 6, 9, 10, 11, 13, and 14 have dealt in whole or in part with the road network. Amendment No. 6 dealt with the incorporation of Site Plan Control into the Official Plan and as a result, modified the footnotes to Figure 9 pertaining to the acquisition of road rights-of-way. Amendments Nos. 9, 10, 11, and 14 dealt with Steeles Avenue, Bay Street and Leslie Street and Front Street respectively, either changing the existing right-of-way width contained on Figure 9 or introducing new road sections and right-of-way widths on Figures 8 and 9. Amendment No. 13 outlined permitted interim uses for transportation corridors.

1.6 Transportation Improvements Since 1980

Since the adoption of the Official Plan in 1980, the following transportation improvements serving Metropolitan Toronto have been approved and/or constructed:

I. Municipal Transit

Scarborough RT Line (opened in 1985);

Harbourfront LRT Line (opening Spring, 1990);

Sheppard Subway Phase I (approved by Metro in 1986, construction delayed due to lack of Provincial funding); and

Spadina Subway Extension to Sheppard Avenue (approved by Metropolitan Council in 1989).

II GO Transit

Milton GO Rail Line (service commenced in 1980);

Stouffville GO Rail Line (service commenced in 1981);

Bradford GO Rail Line (service commenced in 1985, no Metro stations except for Union Station); and

Lake Shore East GO Rail Line (extension to Whitby opened 1988).

III Provincial Highways

Highway 427 (extended to Finch Avenue, approval of construction to Highway 407));

Widening of Highway 401, Neilson Road to Brock Road (scheduled completion - 1995); and

Widening of Highway 400, Highway 401 to Highway 407 (construction scheduled for 1992).

IV Metropolitan Road System

Black Creek Drive (opened 1982);

Allen Road/Dufferin Street Extension (opened 1982);

Finch Avenue West Extension (construction started in 1989);

Leslie Street Extension (approved by Metro in 1988, awaiting Ontario Municipal Board/Environmental Assessment approval); and

Front Street Extension (approved by Metro in 1989).

1.7 Changes in Jurisdiction Since 1980

1.7.1 Assumptions by Metropolitan Toronto

The following facilities have been assumed by Metropolitan Toronto and are now part of the Metro road system:

Black Creek Drive (Weston Road to Maple Leaf Drive);
Finch Avenue (Islington Avenue to Kipling Avenue);
(Albion Road to west of Humberline Drive);
(McCowan Road to Markham Road);
Warden Avenue (Finch Avenue to Steeles Avenue);
Sheppard Avenue (Jane Street to Weston Road);
Scarlett Road (St. Clair Avenue to Lawrence Avenue);
Brimley Road (St. Clair Avenue to Highway 401);
Steeles Avenue (Kipling Avenue to Highway 27);
McCowan Road (Finch Avenue to Steeles Avenue);
Eglinton Avenue (Ingerdon Road to Metro/Peel Boundary); and
William R. Allen Road (Clanton Park Road to Overbrooke Place).

1.7.2 Reversions to Area Municipalities

The following facilities have been transferred to the respective local area municipality:

Royal York Road;
Annette Street;
Dupont Street;
Moore Avenue;
Pape Avenue (Eastern Avenue to Danforth Avenue);
Coxwell Avenue (Eastern Avenue to O'Connor Drive);
Eastern Avenue (Leslie Street to Coxwell Avenue);
Leslie Street (Lakeshore Blvd. to Eastern Avenue);
Keele Street (Rogers Road to C.N.R. tracks);

Dufferin Street (Sheppard Avenue to Overbrooke Place);
Beverley Street (Queen Street to College Street);
St. George Street (College Street to Dupont Street);
Wilson Heights Boulevard (Wilson Avenue to Dufferin Street); and
Park Drive Reservation (Don Valley Parkway to Mt. Pleasant Road).

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2.0 CONTEXT

2.1 Daily Vehicular Travel Within Metropolitan Toronto

The Transportation Tomorrow Survey conducted in 1986, provides the most up-to-date information on travel characteristics in the Greater Toronto Area (the G.T.A. includes Metropolitan Toronto and the Region of Durham, York, Peel, Halton and Hamilton-Wentworth). On a daily basis approximately 8.5 million person trips are made within the G.T.A., an averge growth of 3.7 per cent per year from the 3.7 million work day trips recorded in 1964. Approximately 5.1 million (60%) trips have either an origin or destination (or both) within Metropolitan Toronto. Trips made via the automobile, either as the driver or as a passenger, account for 72.7% of the 8.5 million daily trips. This translates into approximately 4.8 million auto trips per day within the G.T.A. Approximately 69% of the 5.1 million person trips made either to, from or within Metropolitan Toronto are made via cars. This generates approximately 2.7 million auto trips within Metropolitan Toronto each day.

Data from the most recent survey of trucking within Metro Toronto indicates that approximately 500,000 daily truck movements occur within the area. Combined with the daily auto trips and including the transit vehicles that use Metro roads, a total of approximately 3.2 million vehicle trips were made on a daily basis within Metro Toronto in 1986.

2.2 Historical Usage of Metropolitan Roads

2.2.1 Growth in Population and Employment in the Metropolitan Toronto Region

Population in the Metropolitan Region (Metro, Durham, York, Peel and Halton), increased approximately 9% since the adoption of the Plan, from 3,417,700 in 1981 to 3,773,000 in 1986. Table 1 illustrates the population growth by Regional Municipality within the Metropolitan Region. Population in Metropolitan Toronto increased from 2,137,395 to 2,192,721 during this period, a growth of 2.6%. In the Regional Municipalities outside of Metropolitan Toronto, population increased from 1,280,306 to 1,540,339, a growth of 20.3%.

Table 1

Greater Toronto Area Population 1981 - 1986

	1981	1986	Growth	Percentage Growth
Metropolitan Toronto	2,137,395	2,192,721	55,326	2.6
Durham	283,639	326,179	42,540	15.0
York	252,053	350,602	98,549	39.1
Peel	490,731	592,169	101,438	20.7
Halton	253,883	271,389	17,506	6.9
Regional Sub-total	1,280,306	1,540,339	260,033	20.3
Metropolitan Region Total	**3,417,701**	**3,733,060**	**315,359**	**9.2**

Employment within the region, illustrated in Table 2, increased over the same period by approximately 13.7%, from 1,775,946 to 2,019,425. Within Metropolitan Toronto employment grew 6.5% from 1,240,000 to 1,320,000. In the regional municipalities surrounding Metropolitan Toronto, employment grew by 30.5% from 535,946 to 699,425.

2.2.2 Growth in Travel Demand in Metropolitan Toronto

The Metropolitan Planning Department, in conjunction with other agencies, conducts a comprehensive cordon count program every two years throughout Metropolitan Toronto to gather information on person and vehicular travel. This information provides a snapshot of travel patterns across a number of screenlines on a two-year cycle since 1975. Specific screenlines are joined together to form cordons around specific areas that can then be used for analysis purposes.

Figure 3 illustrates the outer cordons used by the Planning Department in the analysis of travel demand trends. The Metro Boundary Cordon follows the Metropolitan boundaries with the Region of Peel to the west, the Region of York to the north and the Region of Durham to the east. The Suburban Cordon generally encloses the older areas of Metropolitan Toronto and follows the Humber River on the west, Highway 401 on the north and the CN Uxbridge Subdivision on the east. The Central Area Cordon defined by Bathurst Street on the west, the CP North Toronto Subdivision on the north and the Don River on the east, encloses the central area of the City of Toronto.

Tables 3 and 4 present data collected in the 1975, 1981 and 1987 cordon count programs for the three cordons described above. Data is presented for these three years to illustrate growth to 1987 from the start of the cordon count program, and growth from the year closest to the year (1980) in which the existing Official Plan was adopted. Table 3 presents data on two-way person trips between 7:00 a.m. and 7:00 p.m., while Table 4 presents two-way

Table 2

Greater Toronto Area Employment 1981 - 1986

	1981	1986	Growth	Percentage Growth
Metropolitan Toronto	1,240,000	1,320,000	80,000	6.5
Durham	103,160	117,000*	13,840	13.4
York	105,945	170,612	64,667	61.0
Peel	227,086	301,813	74,727	32.9
Halton	99,755	110,000*	10,245	10.3
Regional Sub-total	535,946	699,425	163,479	30.5
Metropolitan Region Total	**1,775,946**	**2,019,425**	**243,479**	**13.7**

* Note:
Actual 1986 Employment data not available for Durham and Halton, figures shown are estimated based on actual 1981 figures and 1991 employment projections.

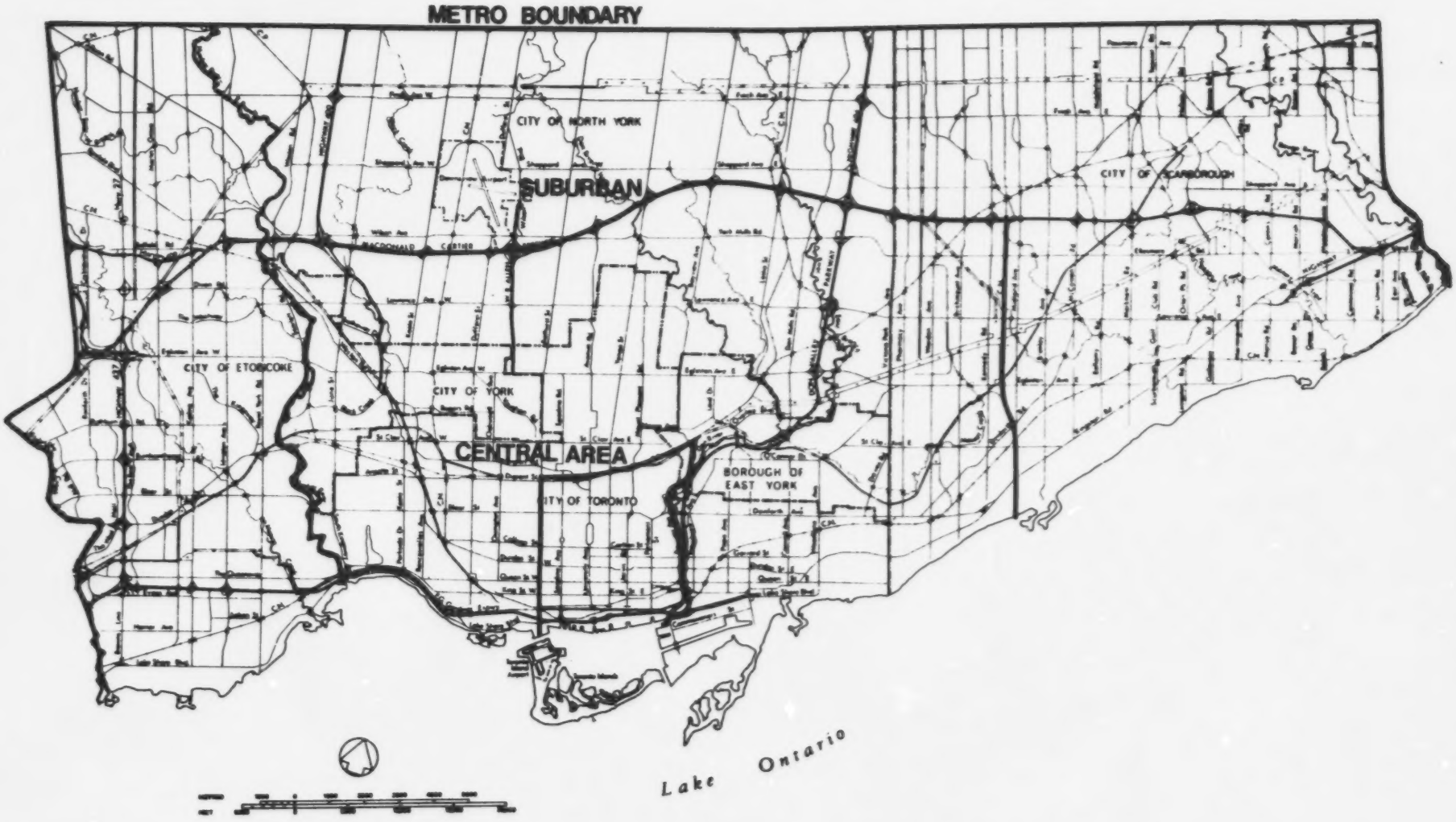

FIGURE 3: METROPOLITAN CORDON COUNT, OUTER CORDONS

vehicle trip data for the same time period. Person trip data gives a picture of overall travel demand, while vehicle trip data illustrates usage of the area road network. Person trip totals do not include trips made via trucks.

Total travel demand (as measured by two-way person trips between 7:00 a.m. and 7:00 p.m.) across the Metro Boundary Cordon has increased by 106.2% (737,528 trips) between 1975 and 1987 and by 35.9% (378,304 trips) between 1981 and 1987. Across the Suburban Cordon, total two-way person trips grew 40% (520,208 trips) between 1975 and 1987 and 16.9% (258,560 trips) between 1981 and 1987. Growth across the Central Area Cordon was 21.4% (252,945 trips) between 1975 and 1987 and 7.6% (101,662 trips) between 1981 and 1987.

Overall, total (12 hour) travel demand has increased significantly throughout Metropolitan Toronto since 1975, with the largest increases occurring across the Metropolitan Boundary. Total two-way travel measured in 1987 was approximately equal across the Central Area and Metro Boundary Cordons (approximately 1,430,000 trips) and was significantly higher across the Suburban Cordon (approximately 1,790,000 trips).

Two-way vehicle trips across the Metro Boundary grew by 111.2% (646,362 trips) between 1975 and 1987 and by 40.9% (356,725 trips) between 1981 and 1987. Across the Suburban Cordon two-way vehicle trips increased by 38.7% (340,713 trips) between 1975 and 1987 and by 17.4% (181,040 trips) between 1981 and 1987. Growth across the Central Area Cordon was 23.4% (122,225 trips) between 1975 and 1987 and 15.7% (87,633 trips) between 1981 and 1987.

Similar to the growth patterns of overall person trip travel, the largest growth in vehicle trip making was across the Metro Boundary, with proportionally smaller increases across the cordons closer to the downtown area. However, unlike the person trip transit patterns, the total number of two-way vehicle trips in 1987 across the Metro Boundary and Suburban Cordon were approximately equal, (approximately 1,222,000 trips), while the total across the Central Area Cordon was significantly less (approximately 645,000 trips).

Table 3

Two-Way Person Trips

7:00 a.m. - 7:00 p.m.

	1975	1981	1987	Growth % 75-87/81-87
Metro Boundary Cordon				
Auto and Taxi	629,043	928,159	1,272,470	102.3/37.1
Transit	49,452	92,856	116,750	136.1/25.7
GO Rail	16,016	32,720	42,819	167.4/30.9
Total	694,511	1,053,735	1,432,039	106.2/35.9
Suburban Cordon				
Auto and Taxi	970,583	1,134,972	1,293,336	33.3/14.0
Transit	275,890	352,726	441,861	60.2/25.3
GO Rail	22,016	42,439	53,500	143.0/26.1
Total	1,268,489	1,530,137	1,788,697	41.0/16.9
Central Area Cordon				
Auto and Taxi	579,727	599,258	667,813	15.2./11.4
Transit	578,357	688,215	710,108	22.8/3.2
GO Rail	22,617	44,511	55,725	146.4/25.2
Total	1,180,701	1,331,984	1,433,646	21.4/7.6

Table 4

Two-Way Vehicle Trips

7:00 a.m. - 7:00 p.m.

	1975	1981	1987	Growth % 75-87/81-87
Metro Boundary Cordon				
Auto and Taxi	472,143	737,899	1,022,320	116.5/38.5
Trucks	106,942	128,273	197,667	84.8/54.1
Transit Vehicles	2,327	4,877	7,787	234.6/59.7
Total	581,412	871,049	1,227,774	111.2/40.9
Suburban Cordon				
Auto and Taxi	745,336	906,292	1,043,897	40.1/15.2
Trucks	127,990	123,929	164,104	28.2/32.4
Transit vehicles	7,771	10,549	13,809	77.7/30.9
Total	881,097	1,040,770	1,221,810	38.7/17.4
Central Area Cordon				
Auto and Taxi	444,059	467,286	538,579	21.3/15.3
Trucks	71,991	82,874	99,402	38.1/19.9
Transit vehicles	6,274	6,756	6,568	4.7/(2.8)
Total	522,324	556,916	644,549	23.4/15.7

The different patterns between person trips and vehicle trips reflect the higher usage of transit in the inner parts of Metropolitan Toronto. Conversely, however, this pattern also illustrates the continued dominance of vehicle travel in the outer parts of Metropolitan Toronto (and in the Regions outside Metro which exert continuing pressure on the road network in these areas).

2.2.3 Goods Movement

An important component of total vehicle trips are those made by trucks. These trips are important not only because of the impact trucking has on the regional economy, but also the physical impact trucks have on the road system, both from a capacity viewpoint and from the viewpoint of the pavement structure lifespan. Across all three Metropolitan Cordons the numbers of trucks have increased since 1975. However, more importantly between 1981 and 1987 the percentage growth of two-way truck trips across all cordons is higher than the percentage growth in auto and taxi trips. As a result, the percentage of trucks in the traffic stream has been growing since 1981.

On a daily basis trucks comprize some 10 to 20 per cent of the traffic flow on Metropolitan roads. This translates into approximately 500,000 truck trips occurring within Metropolitan Toronto on a daily basis. Truck trip production varies from a high of 1,750 trips per square kilometer in the Central Area to 100 trips per square kilometer in the regions surrounding Metropolitan Toronto.

2.2.4 Trip Rates and Auto Occupancy

The information presented in the preceding two sections illustrates that travel demand, both person trip travel and vehicular travel, has increased in the suburban areas of Metropolitan Toronto at a faster rate than the overall increases in population and employment. Two factors account for these trends:

(i) increasing trip rates, i.e. the number of trips made per person per day, and

(ii) decreasing auto occupancies, i.e. the average number of persons in each car.

Table 5 illustrates the historical pattern in trip rates (the number of trips made per day) from 1956 through 1986 from various travel surveys conducted during the last 30 years.

In the G.T.A. the daily trip rate has increased from 1.3 trips per person in 1964 to 2.1 trips per day in 1986, an increase of 61.5 per cent. The trip rate for Metro Toronto has increased from 1.3 trips per day in 1964 to 2.0 trips per day in 1986, an increase of 53.8 per cent.

Since 1975 auto occupancies has decreased across all cordons, as illustrated in Table 6. At the Metro Boundary a.m. and p.m. peak period peak direction auto occupancies has decreased from 1.238 and 1.374 persons per vehicle (p.p.v.) respectively in 1975 to 1.197 and 1.250 p.p.v. respectively in 1987 (decreases of 3.3 per cent and 9.0 percent). Across the Central Area cordon the decreases have been from 1.356 and 1.388 p.p.v. in 1975 to 1.250 and 1.316 p.p.v. respectively in 1987 (decreases of 7.8 and 5.2 per cent). The impact of this trend is that, for example, inbound across the Central Area cordon in the a.m. peak period, 8.5 per cent more cars would have to cross the cordon in 1987 to carry the same number of persons counted in 1975.

Therefore, not only are auto travel demands increasing as a result of population and employment growth, auto volumes are increasing at a faster rate than population and employment growth because more trips per person are being taken and more people are travelling by themselves when they make their trips.

Table 5

Trip Rates*, 1956-1986

Trips Per Person Per Day

	1956	1964	1974	1976	1979	1986
Durham	---	1.4	---	---	1.6	2.3
York	---	---	---	---	2.2	2.2
Metro Toronto	1.2	1.3	---	---	2.0	2.0
Peel	---	---	---	2.2	---	2.2
Halton	---	---	---	---	---	2.5
Hamilton-Wentworth	---	---	2.0	---	---	2.2
Greater Toronto Area	---	1.3	---	---	---	2.1

* Walking and Bicycle Trips Excluded

NOTE: Extent of under-reporting may be influenced by survey methodology

SOURCE: 1. Travel Surveys from Municipalities, 1956-1979
2. Transportation Tomorrow Survey, 1986 (persons under 6 excluded)

Table 6

Auto Occupancies at Major Cordons

	PERSONS PER VEHICLE	
	A.M. PEAK INBOUND	P.M. PEAK OUTBOUND
Metro Boundary Cordon		
1975	1.238	1.374
1977	1.243	1.331
1979	1.221	1.285
1981	1.219	1.283
1983	1.234	1.279
1985	1.216	1.255
1987	1.197	1.250
Suburban Cordon		
1975	1.277	1.337
1977	1.266	1.318
1979	1.250	1.298
1981	1.231	1.290
1983	1.266	1.304
1985	1.228	1.250
1987	1.222	1.272
Central Area Cordon		
1975	1.356	1.388
1977	1.346	1.383
1979	1.381	1.415
1981	1.319	1.348
1983	1.318	1.351
1985	1.294	1.327
1987	1.250	1.316

NOTE: Taxis included.

2.2.5 Accident Data

The number of reportable accidents in a Metropolitan area can be an important indication of current road conditions. The Roads and Traffic Department collects accident data for the Metropolitan arterial road system and compiles the data on an an annual basis by intersection and road section. Table 7 lists the total annual number of accidents that occurred on the arterial road network for the years 1977 through 1987. The average over this eleven year period was 29,950 accidents per year. The years 1982 through 1985 were below this average, while the last two years' 1986 and 1987 were above the average at 31,029 and 32,370 respectively. Although not entirely conclusive, this rise in the number of accidents in 1986 and 1987 could be related to the increase in total traffic and can be indicative of the rising congestion on the road system.

2.2.6 Levels of Service

Level of service on roads is a combination of many factors and can be measured by the volume to capacity ratios (v/c) of various road segments or intersections and the travel speeds along segments of roads. The most recent study of existing Metropolitan road conditions was conducted as part of the North West Metro Transportation Study - Phase I. This study examined existing (1985/86) and future conditions in the part of Metropolitan Toronto, west of Bathurst Street.

The reader is directed to the report published at the conclusion of the study for details of the study results, which are briefly summarized below.

Volume/Capacity Ratios

The examination of roadway section volume to capacity ratios identified 10 of 18 screenlines in the study area with v/c ratios of 0.85 or greater. A v/c ratio of 0.85 is considered the threshold level above which serious congestion problems are expected to occur.

Table 7

Annual Number of Vehicular Accidents

On Metropolitan Arterial Roads 1977 - 1987

YEAR	NUMBER OF VEHICULAR ACCIDENTS
1977	31,909
1978	29,837
1979	28,656
1980	31,120
1981	33,779
1982	28,921
1983	26,028
1984	28,859
1985	26,858
1986	31,029
1987	32,370

Source: Roads and Traffic Department Statistics

The examination of intersection volume to capacity (v/c) ratios identified 16 of 41 intersections with weighted average v/c ratios of 0.85 or greater. At 22 of 41 intersections, at least one of the critical movements had a v/c ratio of 0.85 or greater.

Travel Speeds

The Northwest Metro Transportation Study examined 1978 and 1986 auto speed data to determine the change in auto speeds in the north west part of Metro. The 1978 data showed that the outer suburban parts of Metropolitan Toronto (i.e. west of the Humber River, north of Highway 401 and east of Victoria Park Avenue) generally had higher speeds than the inner parts of the Metropolitan area. Travel speeds tended to decrease the closer the road section was located to the Central Area of the City of Toronto. The 1986 data indicated the same general overall trend as the 1978 data, however, the travel speeds on the outer suburban road sections decreased more than the inner metropolitan areas. These observations are consistent with the impact of the higher growth in vehicular traffic observed in those areas over the same time period.

2.3 Future Usage of Metropolitan Roads

2.3.1 Future Population and Employment in the Metropolitan Toronto Region

Population in the Metropolitan Region is expected to increase from 3,733,060 in 1986 to 5,237,800 in 2011 (the time horizon of the current Plan Review), an increase of approximately 40%. Table 8 illustrates the expected growth in population for Metropolitan Toronto and the four Regional municipalities within the G.T.A. Population within Metropolitan Toronto is expected to grow 334,000 (15.3%) between 1986 and 2011. However, population in the four regional municipalities is expected to increase approximately 76% over the same period from 1,540,339 to 2,710,400.

Table 8

Projected Population Growth 1986 - 2011
(May, 1989 Projections)

	1986	2011	Growth	Percentage Growth
Metropolitan Toronto	2,192,721	2,527,400	334,679	15.3
Durham	326,179	580,000	253,821	77.8
York	350,602	743,000	392,398	111.9
Peel	592,169	1,012,400	420,231	71.0
Halton	271,389	375,000	103,611	38.2
Regional Sub-total	1,540,339	2,710,400	1,170,061	76.0
Metropolitan Region Total	**3,733,060**	**5,237,800**	**1,504,740**	40.3

Projected employment growth in the G.T.A. between 1986 and 2011, illustrated on Table 9, is approximately 896,000, an increase of 44.4%. Within Metropolitan Toronto, employment growth is projected to be 286,600, from 1,320,000 to 1,606,600. In the regional municipalities surrounding Metropolitan Toronto, employment is expected to increase by 87.1% from 689,425 to 1,308,900.

2.3.2 Future Travel Demand

The most up-to-date future travel demand information is based on the 1981 Census journey-to-work data and forecasts of future population and employment. Updated information from the 1986 Census and Transportation Tomorrow Survey should be available later in 1989 and will be used to develop enhanced travel forecasts.

Current travel demand projections for future years use the 1981 data plus projections of future land use in the Greater Toronto Area. The most recent projections (M1-86) are presented in this paper to provide an overview of expected growth in travel demand between 1981 and 2011[1].

The growth in 24 hour work trips destined for Metropolitan Toronto is summarized in Table 10. and illustrated in Figures 4, 5 and 6.

Key highlights from this information are:

- o total work trips in the region are expected to grow by 24.1% (301,800) between 1981 and 2011;

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1. Updated future travel demand estimates will be produced based upon the 1989 M.T.P.D. Population and employment projections in the Fall of 1989.

Table 9

Projected Employment Growth 1986 - 2011
(May, 1989 Projections)

	1986	2011	Growth	Percentage Growth
Metropolitan Toronto	1,320,000	1,606,600	286,600	21.7
Durham	117,000*	227,000	110,000	94.0
York	170,612	342,000	171,388	100.5
Peel	301,813	589,800	287,987	95.4
Halton	110,000*	150,100	40,100	36.5
Regional Sub-total	699,425	1,308,900	609,475	87.1
Metropolitan Region Total	**2,019,425**	**2,915,500**	**896,075**	**44.4**

*NOTE:

Actual 1986 Employment data for Durham and Halton are unavailable, figures shown are estimated based on 1981 actual figures and 1991 employment projections.

- o work trips originating from and destined to Metro Toronto are expected to decline by 2.9% (8,700), but will still represent two thirds of all work trips destined for Metro;
- o cross boundary work trips are expected to increase by 141.9% (310,500) over the 30 year period;

Table 11 illustrates the forecast growth in AM Peak Hour inbound auto and transit person trips across the three major Metropolitan Cordons between 1981 and 2011, based on the M1-86 land use forecasts. At the Metropolitan boundary, auto and transit person trips are expected to grow 101.4% and 95.2% respectively. Across the suburban cordon, auto and transit person trip growth is expected to be 25.3% and 26.1%, while across the central area cordon, growth is expected to be 12.3% for auto person trips and 8.6% for transit person trips.

The implications of these forecasts are significant as congestion on the road network will continue to grow and, because the majority of new trips will be longer distance inter-regional trips, congestion on the highway systems (both provincial and Metropolitan) is expected to continue to worsen.

Table 10

24 Hour Work Trips Destined To
Metropolitan Toronto 1981 - 2011
(May, 1989 Projections)

	1981		2011 Projections		30 Year Growth	
From	Absolute	%	Absolute	%	Absolute	%
Halton	18,200	(1.5)	31,700	(2.0)	+13,500	(4.5)
Peel	105,700	(8.4)	189,300	(12.2)	+83,600	(27.7)
York	59,500	(4.7)	211,600	(13.6)	+152,100	(50.4)
Durham	35,400	(2.8)	96,700	(6.2)	+61,300	(20.3)
Sub-total from Beyond Metro	218,800	(17.4)	529,300	(34.0)	+310,500	(102.9)
From Metro	1,034,000	(82.6)	1,025,300	(66.0)	-8,700	(-2.9)
Total	**1,252,800**	**(100)**	**1,554,600**	**(100)**	**301,800**	**(100)**

*NOTE:

Based on 1971 and 1981 Census Journey-to-Work data.
Updated projections to be calculated upon receipt
of 1986 Census Journey-to-Work data.

Table 11

Forecast A.M. Peak Hour Inbound
Travel Demand 1981 - 2011

	1981	2011	Growth	% Growth
Metro Boundary Cordon				
Auto Persons	68,500	137,950	69,450	101.4
% Auto	75.7	76.3		
Transit Persons	21,950	42,850	20,900	95.2
% Transit	24.3	23.7		
Suburban Cordon				
Auto Persons	74,500	93,350	18,850	25.3
% Auto	52.0	51.9		
Transit Persons	68,650	86,550	17,900	26.1
% Transit	48.0	48.1		
Central Area Cordon				
Auto Persons	50,200	56,350	6,150	12.3
% Auto	29.8	30.5		
Transit Persons	118,350	128,550	10,200	8.6
% Transit	70.2	69.5		

FIGURE 4:
1981 24 HOUR HOME TO WORK TRIPS*

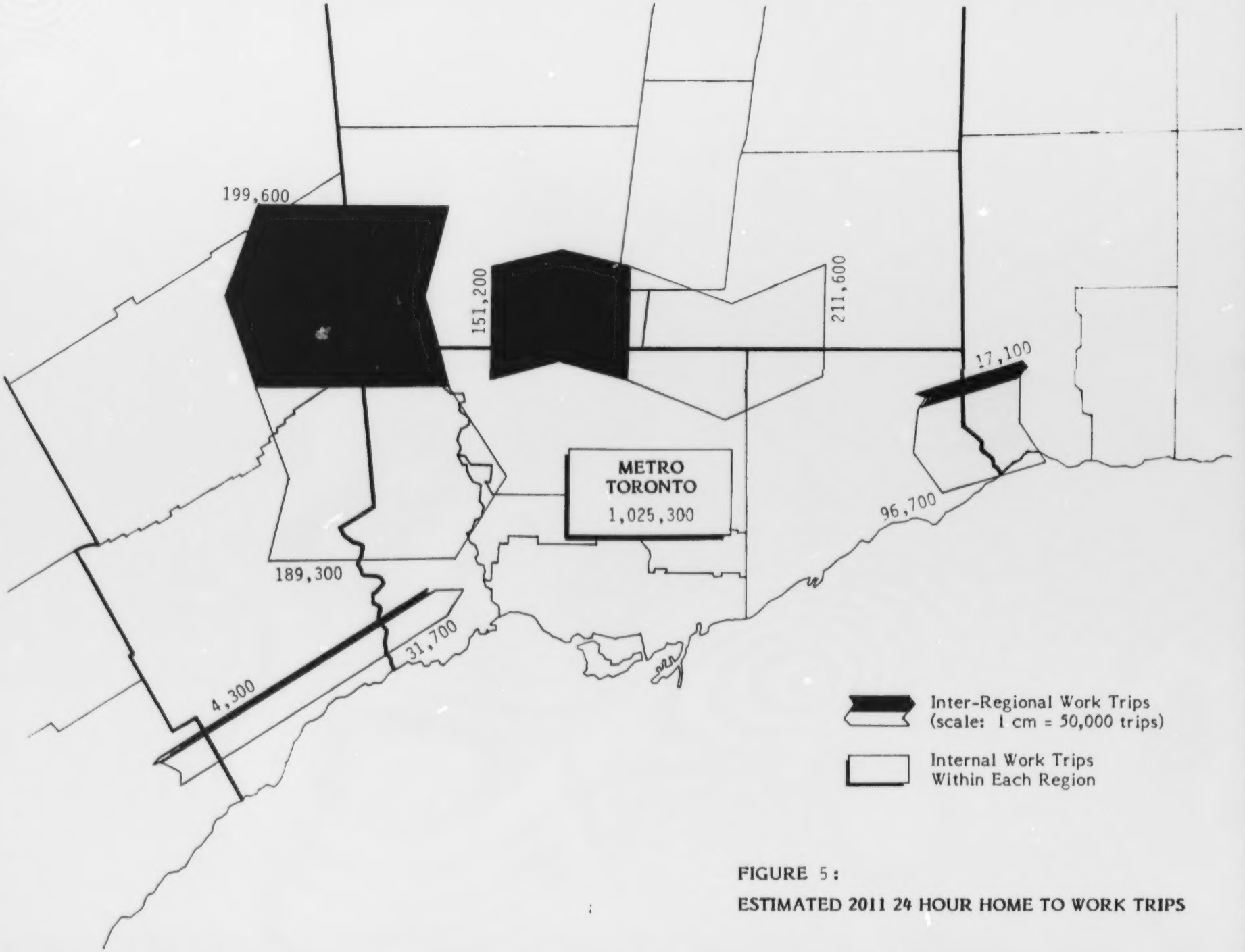

FIGURE 5:

ESTIMATED 2011 24 HOUR HOME TO WORK TRIPS

FIGURE 6 :
ESTIMATED GROWTH IN 24 HOUR HOME TO WORK TRIPS 1981-2011

3.0 CHALLENGES

3.1 Congestion

Vehicular travel on Metropolitan roads has increased by approximately 6% per year since 1981 and the effects of this growth are felt as increased congestion and delays throughout all parts of the region. Factors that contribute to the growing congestion, in addition to increasing population and employment, include missing road links, decreasing auto occupancies and competing demands for existing road space. Pressures resulting from increased congestion lead to increased wear and tear on the existing road infrastructure and to the need to examine improvements to the existing road network.

3.2 Incomplete Road Network

The Metropolitan road system is basically a grid network of roads that is intended to span the entire urban area. Figure 8 of the Official Plan illustrates the network, however, to-date some of the most important links in the network, especially across major physical barriers, have not been constructed. These road sections, Finch Avenue East, Lawrence Avenue East and Wilson Avenue extensions, are necessary to complete a comprehensive network of roads to serve all parts of Metropolitan Toronto. Other roads not included in the Official Plan, such as, Front Street Extension, Leslie Street Extension and Lawrence Avenue connection (east of Bayview) would be of substantial benefit to the overall network. The lack of these connections forces traffic to divert to other routes, thereby placing an additional burden on those facilities. A completed grid network will provide for a more uniform distribution of traffic and ensure routes are available in case of major disruption due to accidents, natural disasters or road construction.

3.3 Need for Road Widenings

Travel demand in Metropolitan Toronto is expected to increase significantly over the next 20 years with the majority of this demand continuing to be via the automobile. The impact of the continued growth in auto-oriented travel will be increasing congestion on the entire road network, with special emphasis on the boundary areas with the Regions adjacent to Metro. Assuming that the missing links currently identified in the plan are constructed, efforts to accommodate these levels of traffic demand will be limited to widenings of existing facilities (where appropriate and practical) and to measures designed to maximize the capacity of the existing road system. Due to the inter-dependance of the operation of the road systems under the various levels of government consideration may also have to be given to Metropolitan Toronto assuming roads from other jurisdictions to ensure their operation is consistent with various regional goals and objectives.

3.4 Competing Demands for Existing Road Rights-of-Way

Existing Metropolitan road rights-of-way not only provide space for facilities associated with the movement of vehicles (i.e. pavement, traffic control devices, etc.) but are also used for a number of other purposes, such as pedestrians (sidewalks), bicycles, parking, loading and unloading, utilities, street furniture and landscaping. Recent initiatives by the Roads and Traffic Department with respect to guidelines for landscaping of Metropolitan road rights-of-way and by the Gardiner/Lake shore Task Force with respect to improving the urban design of the Gardiner/Lake Shore Corridor have focussed attention on non-transportation related uses of existing road rights-of-way. The growth in the number and extent of non-road transportation related demands has placed increasing pressure on existing road rights-of-way and affect the primary function of the rights-of-way which is the movement of people and goods. New policies which recognize and address these problems will have to be considered in light of existing and predicted future traffic congestion.

3.5 Road and Pedestrian Safety

Road congestion not only poses network capacity problems but it will also, due to the human nature of drivers, directly impact on the safety of roads for the travelling public and pedestrians. Recent experience has indicated that as congestion worsens, more drivers exhibit unsafe driving characteristics. Future road improvements may have to be implemented to reduce or eliminate identified safety problems.

3.6 Goods Movement

Economic growth in the Greater Toronto Area has resulted in increases in truck traffic at a faster rate than increases in overall vehicular demand. Traffic congestion is affecting the ability to effectively move goods within the Metropolitan area and, as congestion grows, the costs of moving costs will also increase. The Roads and Traffic Department's Goods Movement Study estimated that by 1997 more than 50 per cent of the cost of moving goods will be due to congestion. Efforts to address the problems of the goods movement industry were recommended as a result of the above noted study. In order that future economic activity is not constrained by goods movement problems, these recommendations should be implemented.

Of particular importance is the issue of transportation of dangerous goods within the Metropolitan area. More than 6,000 railway carloads of dangerous goods are transported within Metropolitan Toronto each year. However, approximately 18,000 daily truck trips within Metropolitan Toronto involve dangerous goods. Programs and policies to effectively promote the safe transportation of dangerous goods within Metropolitan Toronto should be pursued.

3.7 Maintenance and Rehabilitation

The Roads and Traffic Department undertakes a comprehensive program of maintenance and rehabilitation of existing facilities, including resurfacing

and reconstruction of entire sections of roads and bridges. To maintain the integrity of the existing infrastructure as the roads and bridges grow older maintenance activities will have to become increasingly more important. In addition, with increased traffic volumes on the roads, the need for more and more extensive maintenance activities grows. It is a fact that resurfacing of the road surface at timely intervals can extend the useful life of the road section; however, if because of other priorities, these rehabilitative works are delayed or postponed, then the road may have to be fully reconstructed earlier than otherwise would have been required, which effectively increases the costs of rehabilitation.

The aging road network will require adequate levels of funding to maintain the infrastructure in a cost effective manner. With ever increasing amounts of traffic on the system the degradation of the roads will occur at a faster rate, thereby leading to even more frequent maintenance work. It is likely in future that these activies will become one of the most important aspects of the road system. How they are coordinated (to minimize impacts on the rest of the system) and funded will be critical to the overall successful operation of the system.

3.8 Funding

The completion of the road network, widenings of existing roads and maintenance activities all cost a significant amount of money. Until recently, the Provincial government funded fifty (50) per cent. of the cost of all necessary works, with the remainder of the cost borne by Metropolitan Toronto. Since 1985, the Province has capped the level of its subsidy at a level much less than 50% of the Roads and Traffic Department's preliminary budget estimate. As a result, Metropolitan Council has had to decide whether to fund more than 50% of the cost of road works or to cut back on the amount of work that can be undertaken in that year. Up until 1988, Council had decided to only match the Provincial subsidy and, therefore,

priorities have had to be changed to accommodate an overall budget significantly less than required based on the identified needs. In 1988, Council committed an expenditure of $2.65 million of unsubsidized dollars for road construction. Approximately $26 million of works identified by the Roads and Traffic Department have to had be deleted from the 1989 Capital Budget because of the Provincial cap on subsidy payments.

The lower funding level impacts all aspects of the road network by delaying new roads and road widenings and especially by deferring the necessary rehabilitation functions. As noted earlier, delays in ongoing rehabilitation of existing roads may actually lead to earlier expensive reconstruction. For example, based on an average pavement rehabilitation cycle of 15 years, 48 kilometers of Metropolitan arterial roads should be resurfaced each year; however, due to budget constraints only 32 kilometers per year are currently being resurfaced.

Future funding levels will determine how much maintenance and expansion work can be undertaken. This will directly impact how the system will operate and whether or not the network will be able to cope with the expected levels of traffic.

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4.0 ISSUES

4.1 How to deal with Existing and Future Road Congestion

The level of congestion on the Metropolitan road network is growing and forecasts of future travel demands indicate that these levels can be expected to continue to worsen as traffic volumes increase. Assuming, for the basis of this paper, that the future travel demand forecasts will actually occur (i.e. no other steps are taken to modify the current trends in travel growth), and as noted earlier, a significant proportion of the total travel demand will be via the automobile, there appears to be two approaches available to accommodate this demand, or at least attempt to mitigate the overall impact on the road network:

(i) develop programs or strategies to achieve the optimum use of existing infrastructure; and

(ii) implement infrastructure improvements.

The limitations of improvements to the road systems also necessitate that actions be undertaken to modify the propensity for automobile use. These actions should include improvements to inter- and intra-municipal transit, intensification of land use to make rapid transit options practical and demand management programs such as variable work hours or employer sponsored car/van pools.

4.1.1 Protecting the Integrity of the Road System

The current Official Plan, while outlining the road network and policies required to implement the road network, tends to place more emphasis on the transit network rather than road network. However indicative of the importance of the transit network in the structure of Metropolitan Toronto, the Official Plan must also explicitly recognize that an efficient road system is vital to the operation of the transit system(over 80% of TTC routes use Metropolitan roads) and to the economic health of the Metropolitan area. Therefore, the wording of the transportation objectives in the Official Plan

should be modified to reflect that the transportation network servicing Metropolitan must be an integrated network of transit and roads.

4.1.2 Optimizing Existing Infrastructure Usage

The current limitations on transportation funding and the recognition that Metropolitan Toronto is a mature urban area with limited opportunities for road infrastructure improvements, lead directly to considering as a priority, the development of programs and strategies that attempt to gain the optimum use of the existing road network. The types of programs and strategies that could be implemented fall under four categories:

(a) Transportation System Management (T.S.M.) Measures

Except for transit priority the existing Official Plan does not explicitly recognize T.S.M. measures as critical to the improvement of the operation of the road system. Therefore, consideration should be given to recognizing in the Official Plan an intent by Council to actively pursue these types of activities. Special attention should be focussed on intersection improvements as a cost-effective method of increasing road capacities.

The term Transportation System Management (T.S.M.) can be applied to types of activities aimed at using existing transportation facilities efficiently. These activities can range from traffic engineering improvements to regulatory, pricing or management policies and generally attempt to increase traffic capacity (supply) or to reduce overall demand.

Specific traffic engineering improvements that could be considered for T.S.M. include; signal timing optimization, enhanced computerized traffic control, freeway surveillance and control, truck restrictions/enhancements, improved parking enforcement, expanded peak period parking restrictions, one-way street systems, reversible lanes and minor/major intersection improvements. The level of benefit

for each of these activities vary and would have to be determined as a result of study prior to considering implementation. Three activities that may have the greatest impact on improving the operation of existing roads are intersection improvements, parking controls and integrated traffic control systems.

Improvements to existing intersections have the potential to be one of the most cost-effecitve improvement options available today. Adding turning lanes and additional through lanes at an intersection can provide significant improvements to arterial road capacity, operations and safety at a relatively minor cost, when compared to the cost of new roads or road widenings. The Roads and Traffic Department has, when funding permits, embarked on an annual intersection improvement program and these efforts should be continued and expanded with appropriate funds made available.

One of the most frustrating experiences for both motorists and transportation professionals is the impact parked vehicles have on the operation of the existing road system. One illegally parked vehicle or legally parked vehicle in an inappropriate location can effectively reduce the capacity of a road by one full traffic lane. Effective parking control can gain back for the use of the travelling public all of the existing road space and reduce the pressure for additional road infrastructure.

Parking controls take two forms, the first being the identification of appropriate parking restrictions and the second being the enforcement (including public information and education) of those restrictions that are implemented.

It is critical that effective and implementable parking policies be formulated and adopted by Council. It is also critical that when the parking restrictions are implemented sufficient resources are available

to ensure that the restrictions are enforced. Vigilant enforcement not only ensures the effective operation of the road system but provides the added bonus of generating revenues that could be channelled to the transportation budgets. Consideration may have to be given to the New York City model where the traffic and parking control functions are within the transportation department rather than the police department. While the issue of a Metropolitan parking policy was recently dealt with by Metropolitan Council, the prevailing conditions of the road system as noted in this report will require a re-examination of those policies.

Strategic traffic control initiatives (computerized traffic control and freeway traffic management) can significantly improve the flow of traffic on the arterial roads and expressways. Recent initiatives by the Road and Traffic Department should be supported and expanded.

(b) Transit Priority

Over 80% of the T.T.C's surface transit routes operate on Metropolitan arterial roads. The success of these operations are tied closely to the ability of the road system to move traffic, including the T.T.C. buses and streetcars. In addition, recognizing that transit vehicles can carry up to 40 times the number of people that a car can carry, special transit priority measures that assist the movement of buses and streetcars along the arterial roads are essential to the ability of the overall network to accommodate future demands.

Types of transit priority measures that could be considered include; reserved bus lanes, special transit only signals to assist turning movements, mainline traffic signal priority, and intersection improvements to assist transit (i.e. queue jumping).

Section 6.D.2 of the existing Official Plan states that Council shall encourage the preferential treatment of transit vehicles on arterial roads. However, it is appropriate to strengthen this commitment in

light of growing traffic congestion and to implement a program to annually review opportunities for implementing specific transit priority measures.

(c) High Occupancy Vehicle (HOV)/Bus Lanes

The declining auto occupancy rates in all parts of Metropolitan Toronto has the effect of reducing the person carrying capacity of major roads and corridors. A program to increase the person carrying capacity of these facilities could include the introduction of High Occupany Vehicle lanes on selected Metropolitan facilities.

High Occupancy Vehicle (HOV) lanes are road lanes dedicated for the use of bus services and/or automobiles with one or more occupants in addition to the driver. These lanes can be either new lanes added to existing roads or existing lanes converted for the use of HOV's. HOV lanes can be beneficial in a network because the number of persons that can be moved in a single HOV lane can be as much as three normal mixed traffic lanes.

However, although the benefits of HOV lanes are clear, and these benefits have been demonstrated in a number of examples in the United States, there are a number of problems/concerns with introducing HOV lanes. These problems mainly stem from a reluctance to take away existing mixed traffic lanes for the exclusive use of HOV's because of the already severe congestion on existing roads. Therefore, the introduction of HOV lanes would seem to be most feasible in conjunction with building new roads or widening long sections of existing roads. Consideration, therefore, should be given to the use of HOV lanes in conjunction with all new major road links and widenings.

(d) Demand Management

The measures described above all attempt to provide additional transportation capacity, i.e. they affect the supply of transportation services and/or infrastructure. Demand management concentrates on

measures that reduce the peak hour demand for the transportation services. These measures include: variable work hours, van or car pooling, mixed-use land development, road and transit pricing strategies and parking supply and pricing strategies. Given the forecast levels of total travel demand, a full examination of measures that reduce or modify demands is warranted.

A review of possible activities to increase the utilization of the existing road infrastructure has indicated a need to strengthen the intent of Council in the Official Plan to recognize the benefits from these activities and to consider implementation of suitable projects as a priority.

In addition to placing increased emphasis or improvements designed to maximize the utilization of the existing Metropolitan road system infrastructure, improved operation of both the local and regional road networks may be achieved by the assumption of additional roads by Metropolitan Toronto. Assumption of these roads could be recommended to ensure that regional objectives are considered in the operation of the roads. Objectives that could warrant assumption of the road by Metropolitan Toronto could include: improved transit operations (eg. assumption of roads not currently in the Metropolitan system upon which major streetcar routes operate), improved access and circulation from regional expressways and provincial highways (eg. assumption by Metropolitan Toronto of Front Street in the City of Toronto and Neilson Road in the City of Scarborough) and improved inter-regional connections (eg. assumption of Rathburn Road west of Highway 427 in the City of Etobicoke to faciliate its extension across Etobicoke Creek).

However, notwithstanding the benefits from these types of activities, the forecast high growth in auto travel will not be able to be accommodated solely through optimizing the use of the existing infrastructure. Therefore, improvements to the road network will have to be seriously considered if the level of congestion is to be maintained at a manageable level.

4.1.3 Infrastructure Improvements

The anticipated growth in overall travel demand in Metropolitan Toronto cannot be accommodated solely by the transit system; therefore, congestion on the existing road system will worsen if measures are not taken to improve the network. As noted in Section 4.1.1., achieving the optimum usage from the existing system is paramount, but even with those activities in place, improvements to the existing network will have to be undertaken if the level of congestion is to be managed successfully. Improvements may also be warranted as a result of road and pedestrian safety concerns. Two types of infrastructure improvements are possible; construction of new roads and widenings of existing roads.

(a) New Roads

Figure 8 of the Official Plan describes the Metropolitan road system for the year 2001. The vast majority of arterial roads identified on Figure 8 are roads that exist today, the only future roads that are identified are the Wilson Avenue extension, the Lawrence Avenue East extension and the Finch Avenue East extension, the Meadowvale Road extension and the Morningside Avenue extension which are all to be located in the currently undeveloped northeastern section of the City of Scarborough.

In order to accommodate growth in auto traffic it is important that all of these future roads ultimately be constructed. The timing of the construction will have to be based on ongoing study of prevailing traffic conditions.

In addition to the completion of the road links already identified in the Official Plan, ongoing monitoring and study of traffic conditions may identify the need for new roads or road links that will be required and these new links where necessary will need to be designated in the Official Plan.

The current Official Plan (Section 6.E.1) explicitly indicates that Metropolitan Toronto does not support the construction of additional expressways, except for the extension of Highway 427 and the protection for a facility in the East Metro Transportation Corridor (E.M.T.C.), which was added to the Plan at the request of the Ministry of Transportation.

While there are currently no plans to seek approval for any additional expressways within Metropolitan Toronto within the time horizon of the Plan, there may in future be a need to examine additional expressway facilities in light of the growing long distance inter-regional trip making patterns. Recognizing this possibility, Section 6.E.1 appears to be unduly restrictive. Improvements to the GO Rail and T.T.C. rapid transit systems should help to obviate the need for additional expressways; however, there are other users of road facilities, namely the goods movement industry, that cannot use any form of public transit. It should be noted that detailed study of any new expressway facilities would require prior approval of Council and furthermore even with the removal of Section 6.E.1 from the Plan, implementation of any new expressway that would ever be contemplated would require a specific amendments to Figures 8 and 9 of the Plan. Section 6.E.1 is therefore redundant and should be removed from the Plan.

Recognizing that it is unlikely that new expressway facilities will be built within the lifetime of the Plan, continued growth in long-distance auto trips will result in additional pressures on the arterial road network. In order to accommodate some of these pressures the integrity of the arterial road network will have to be enhanced and protected. One approach will be to designate certain roads which have a high degree of access control to protect their status. These controlled access arterial roads will have to play an increasingly more important role in the Metropolitan road system and, therefore, it is

recommended that a new definition "primary arterial road" be added to the Official Plan and that the appropriate roads be so identified on Figure No.8, Road Network: 2001.

In recognition of the current uncertainty surrounding the Scarborough Transportation Corridor (due to the lack of definition of the types of facilities that may be accommodated in the corridor) and the likelihood that an expressway would not be constructed in the Corridor in the near future, it is suggested that consideration be given to redesignating the Corridor to a future Metropolitan primary arterial road with sufficient right-of-way width to accommodate future rapid transit options.

(b) Widening of Existing Arterial Roads

The fact that there will be few opportunites for new road links within Metropolitan Toronto indicates that the only major opportunity to increase the capacity of the road network will be through the widening of existing roads. Widenings of existing roads may also be required because of operational and safety concerns.

The identification of the roads that should be widened will have to take place through ongoing monitoring and study. Since the major congestion points in the arterial system usually occur at intersections, some of these studies may also have to address the costs and benefits of the extent of widenings to determine if intersection improvements by themselves will provide the necessary capacity increases without the need to widen long stretches of existing roads.

Current Official Plan policy does not explicitly recognize the actual pavement width of arterial roads, only the right-of-way width, and there does not appear to be a need to do so. However, an explicit recognition in the Plan of the importance of the potential to widen existing roads because of the lack of new road link opportunities is required.

4.2 Goods Movement

The existing Official Plan does not explicitly recognize the importance the Metropolitan road system plays in the transportation of goods within Metropolitan Toronto. The forecast growth in overall vehicular travel which includes increases in truck movements, will impact the cost of goods movements in the Metropolitan area and could have a significant impact on certain sectors of the Metropolitan economy. Recognition by Council of the importance of moving goods, in addition to moving people, will ensure that appropriate operational policies for goods movements are considered in the overall transportation planning for Metropolitan Toronto.

A second, but no less important issue, is the movement of dangerous goods within the Metropolitan area. The increasing transportation of dangerous goods by both road and rail should be a concern that is recognized by Council and appropriate policies should be developed to ensure the safe transportation of these commodities and to provide adequate emergency response to situations involving dangerous goods.

4.3 Limited Rights-of-Way

Figure 9 of the Metropolitan Official Plan establishes the rights-of-way width for the Metropolitan road system. The existing clauses within Sections 6 and 11 of the Plan dealing with rights-of-way acquisition are fairly restrictive in terms of how much rights-of-way can be acquired by the Corporation. Recent experience has indicated that these restrictions frustrate the ability to rationally react to special circumstances when discussing rights-of-way widenings. The circumstances include: location of utilities, landscaping, placement of street furniture, recognition of historical buildings and right-of-way widenings encroaching on existing buildings. Modifications to the Official Plan should be considered to allow flexibility in the rights-of-way policies which will permit the acquisition of additional right-of-way beyond

that designated in the Plan for special circumstances and would also permit incremental acquisition of additional right-of-way in areas where existing buildings encroach on designated rights-of-way widths.

4.4 Non-Transportation Related Issues

In Section 4.3 the issue of the increasing demands on the limited road rights-of-way for non-transportation related uses was discussed. Other non-transportation issues that are related to the road system include recent proposals to increase the density of development along arterial roads and increasing the elements of civic design in the design and construction of transportation infrastructure. While the major thrust of these issues are not directly tied to the primary function of the road system (i.e. transportation), implementation will affect the planning and operation of the network.

4.5 Environment Assessment

The Environment Assessment (E.A.) Act provides for the assessment of most of the types of projects described in Section 4.1 in order that the need for the project is clearly defined and substantiated and the impacts of the project are identified and mitigated, if possible. Public consultation and review are an integral part of the E.A. process. Approval under the E.A. Act (either from the Ministry of Environment or through the Class E.A. process) is required before any project can commence.

Section 6.B.6 of the Official Plan indicates Council's intent to ensure all road and transit projects will have minimal impact on the environment. Compliance with Council's direction in the Official Plan has taken the form of ensuring all projects are examined through the E.A. process.

The principles behind the Environmental Assessment Act are important, but the process of applying those principles is causing Metropolitan Toronto and other municipalities throughout the Province a great deal of difficulty.

The problems are of such a magnitude that a Committee of Regional Municipal Chairmen was organized to communicate to the Province a united message on the problems with the E.A. process. Two main problems were identified; the lack of recognition in the E.A. Act of long range planning and the processes municipalities go through as part of the Planning Act and the significant amount of time, effort and money municipalities have to expend to satisfy the requirements of the E.A. Act.

It is hoped that through the efforts of the aforementioned Committee and others, revisions to the Act will be brought forward to streamline the process while still ensuring that the environment is protected.

4.6 Maintenance and Rehabilitation

The significant improvements that are possible by achieving maximum utilization of the existing roads and by constructing new roads or road widenings will be compromised if the existing infrastructure falls into a state of disrepair.

The maintenance and rehabilitation function must as a result be the highest priority in future road system activities. To ensure that this priority is recognized, a section should be added to the Official Plan to state Council's intent to place as the first priority the maintenance and rehabilitation of the existing infrastructure.

4.7 Funding

The lack of appropriate funding to undertake maintenance, rehabilitiation and infrastructure improvements will ultimately lead to an overall worsening of road congestion throughout Metropolitan Toronto no matter what policies are included in the Official Plan.

Decision makers must be made aware that traffic volumes are going to increase throughout the area and, therefore, a level of funding must be made available to provide for both the maintenance and rehabilitation of the existing roads and improvements to the system through T.S.M. measures, intersection improvements, road widenings and new road links.

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5.0 SUGGESTED AMENDMENTS TO EXISTING OFFICIAL PLAN POLICY STATEMENTS

The Official Plan, although containing a range of specific and detailed provisions is primarily a strategic instrument which outlines the broad policies and programs to be pursued in defining the form and function of the Metropolitan Toronto urban structure. The broad policies with respect to the definition of the Metropolitan road system are currently contained in the plan; however, due to the ongoing growth in urban traffic, new and strengthened policies are required to outline the future directions needed to accommodate or at least manage the growth.

As noted in Section 2.0 of this paper total travel and in particular vehicular travel has increased in all areas of Metropolitan Toronto since 1975. In 1986 it was estimated that approximately 3.2 million vehicle trips were made within Metropolitan Toronto on a daily basis. Future projections of population and employment growth in the Greater Toronto Area (40% growth in population and 44% growth in employment) imply that current road congestion will worsen in future years. The most recent projection of future travel demands indicates growth in peak hour auto travel between 1981 and 2011 of from 12% in the Central Areas of Toronto, to 25% in the suburban areas, to over 100% across the boundaries between Metropolitan Toronto and the surrounding regional municipalities.

While the existing Official Plan provides for establishment and definition of the Metropolitan road system, it does not explicitly recognize the need for an integrated system of both roads and transit. In light of the worsening congestion problems throughout the Metropolitan area, the Official Plan should be modified to express support for an integrated transportation system which includes properly planned and maintained road and transit networks. It is therefore suggested that:

1. **a sub-section be included in Section 6.B Objectives to outline Council's support of an integrated transportation network.**

   New policies for inclusion in the Official Plan must be reviewed to provide the necessary policy directions for development of plans and programs to accommodate the growth in future traffic volumes. Specifically, existing Official Plan statements tend to concentrate on the provision of new elements to the transportation network. As noted earlier in this paper the nature of the Metropolitan urban environment limits the ability to provide new road infrastructure and, therefore, the necessity to optimize the use of the existing system is paramount. It is, therefore, suggested that:

2. **a section be included in the Official Plan which outlines Council's intent to optimize the use of the road system infrastructure, including special emphasis on intersection improvements, more efficient operating strategies, and the consideration of High Occupany Vehicle (HOV) lanes on all new road links and road widenings;**

3. **a section be included in the Official Plan which indicates the highest priority of Council be the maintenance and rehabilitation of existing transportation infrastructure;**

4. **a section be included in the Official Plan to recognize the importance of the ability, based on appropriate study, to widen existing Metropolitan roads.**

   While it is recognized that there are limited opportunities to provide new road links within Metropolitan Toronto, the future roads identified on Figure 8 and 9 of the Plan will eventually have to be constructed if future traffic volumes are to be accommodated. It should also be recognized that there may be other road links required that are not shown on Figures 8 and 9 and

that the Figures may be amended from time to time to include those new roads. The current wording of Sections 6.B.4 and 6.E.2 of the Plan would seem to indicate that the road network as shown on Figures 8 and 9 is the complete network required to serve the area. This, of course, may not be the case. In addition, Section 6.E.1 indicates Council's intent not to support additional expressway facilities within Metropolitan Toronto. The growing long distance inter-regional travel demand and goods movement components of the traffic stream may in future require a re-examination of potential need for new expressways. Council should not restrict itself from examining this potential and in any event Section 6.E.1 is redundant since amendments to Figures 8 and 9 of the Plan would be required to implement any new expressway ever contemplated. Therefore, it is suggested that:

5. **Sections 6.B.4 and 6.E.2 be modified to indicate that additions to the Metropolitan road network may be included on Figures 8 and 9 based upon appropriate review and study as provided for in Section 6.C of the Plan; and**

6. **Section 6.E.1 be removed from the Plan.**

Existing Official Plan policies with respect to the acquisition of road rights-of-way are too restrictive and do not permit sufficient flexibility to deal with the increasing demands for use of road rights-of-way (e.g. utilities, landscaping, street furniture) and to deal with necessary incremental acquisition of designated rights-of-way width. It is therefore suggested that:

7. **Sections 6.E.3 and 11.C.4 be modified to add flexibility to the road rights-of-way acquisition policies.**

Section 6.B.6 of the Official Plan outlines Council's intent with respect to the environmental impact of new or improved transportation system elements. Since all such improvements are subject to the Environmental Assessment Act the Plan should recognize the statutory requirements of the Act. It is therefore suggested that:

8. **Section 6.B.6 be modified to reflect the statutory requirements of the Environmental Assessment Act.**

The success of the T.T.C.'s surface transit network to move large numbers of people in the future will be tied closely with the ability of the buses and streetcars to operate on the road system. Section 6.A.2 of the Plan states that Council "...shall encourage the preferential treatment on transit vehicles on appropriate arterial roads...". However, given the future importance of transit priority, it would be appropriate to strengthen the Council's commitment. It is therefore suggested that:

9. **a section be included in 6.B Objectives to outline Council's intent to actively pursue transit priority measures on Metropolitan roads.**

The importance of goods movement to the Metropolitan economy cannot be understated. Increasing congestion will result in higher costs for goods movement and could impact on the economic viability of certain sectors of the Metropolitan economy. Council should recognize goods movement as an important component of overall travel demand in the area and policies should be considered for inclusion in the Official Plan which ensure the needs of goods movement are considered in planning and operation of the Metropolitan road system.

Council should also consider policies that clearly outline that the objective of Council is to ensure the safe movement of dangerous goods within Metropolitan Toronto, when those goods originate or are destined within Metropolitan Toronto, and to relocate through movements of dangerous goods outside of Metropolitan Toronto.

It is therefore suggested that:

10. a section be included in 6.B Objectives to outline Council's intent to consider the needs of goods movement in the planning and operation of the Metropolitan road system; and

11. a section be in the Official Plan that outlines Council's intent to ensure the safe movement of dangerous goods within Metropolitan Toronto and to clearly indicate Council's desire to relocate through movements of dangerous goods outside Metropolitan Toronto.

APPENDIX A

Metropolitan Official Plan Amendments

Metropolitan Official Plan Amendments

Amendment No.	
1.	Amended Figure 9 to reduce the right-of-way of McCowan Road south of Ellesmere Road and Danforth Road north of Eglinton Avenue to 27 meters.
2.	Dealt with a number of technical matters, including updating Figures 8 and 9 with respect to roads either assumed by Metropolitan Toronto or reverted to various local area municipalities.
3.	Amenmded subsection 1.D to provide new or amended definitions for "group home", "correctional group homes" and "residental area".
4.	Outlined Council procedures for dealing with amendments to the Official Plan.
5.	Amended subsection 8.1 dealing with The Parkway Belt West Plan.
6.	Amended Clause 6.E.3, Figure 9 and subsection 11.C dealing with the acquisition of Metropolitan Arterial Roads: Rights-of-way through site plan control.
7.	Amended Figures 3, 5 and 7 by adding the Harbourfront Light Rail Transit Line
8.	Amended Figures 3, 5, and 7, to illustrate the Sheppard Subway and Eglinton West Rapid Transit Line.
9.	Amended Figure 9 by changing the right-of-way for Steeles Avenue between Keele Street and Jane Street from 36 meters to 45 meters and over.
10.	Amended Figures 8 and 9 to illustrate Bay Street between Queen's Quay and Lake Shore Blvd. as a Metropolitan arterial road.
11.	Amended Figures 8 and 9 to illustrate the extension of Leslie Street from Eglinton Avenue to the Bayview Avenue Extension as a future Metropolitan arterial road.

12. Amended Figure 7 to illustrate the future extension of the Harbourfront LRT Line via Queen Quay West between Spadina Avenue and Bathurst Street.

13. Amended subsection 6.G dealing with interim uses of transportation corridors.

14. Amended Figures 8 and 9 to illustrate the Front Street Extension and Interchange with the F. G. Gardiner Expressway.

INFORMATION TO THE READER

This report is one of a series of background and proposal studies undertaken in the general area of "transportation" as part of the Metropolitan Plan Review.

All members of the community are invited to comment on the matters presented. It is hoped that individuals and organizations with particular expertise on items raised here, will convey their conclusions, concerns and recommendations. These comments will be considered and reported in the preparation of policy recommendations which will follow.

Submissions should be sent to:

Metropolitan Toronto Planning Department
Transportation Division
East Tower, 12th Floor
City Hall
Toronto, Ontario
M5H 2N1

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The "Metropolitan Plan Review" is a program to review the Official Plan For The Urban Structure: Metropolitan Toronto. The program was adopted by Metropolitan Council in March of 1986 and is available in printed form as "Report No.1: Program, Metropolitan Plan Review". Copies are available from the above address.

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